

## **AMENDMENTS TO THE CLAIMS**

### **Claims pending**

- At time of the Action: Claims 2, 4-27, 29-47, 50-52, 54 and 56-67.
- After this Response: Claims 2, 4-27, 50-52, 54 and 56-66.

**Canceled or Withdrawn claims:** 1, 3, 28-49, 53, 55 and 67.

**Amended claims:** None.

**New claims:** None.

1. (CANCELED).
2. (PREVIOUSLY PRESENTED) The cellular phone of claim 5 further comprising a context service module that is configured to receive information from multiple different context providers.
3. (CANCELED).
4. (PREVIOUSLY PRESENTED) The cellular phone of claim 5 the processors being further configured to automatically determine the current context by traversing at least one node of the data structure.

5. (PREVIOUSLY PRESENTED) A cellular phone comprising:

one or more processors configured to:

receive information that pertains to a current context of the cellular phone;

determine the current context based on the information and a hierarchy data structure of attributes, wherein each node of the data structure is capable of corresponding to a physical or logical context;

modify at least one behavior of the cellular phone responsive to the current context, wherein at least one of said one behavior is defined by a third party; and

an application program interface that is configured to wirelessly receive information that is associated with the phone's context.

6. (PREVIOUSLY PRESENTED) A method of operating a cellular phone comprising:

wirelessly receiving, with the cellular phone, information that pertains to either a physical or logical context of the cellular phone, the cellular phone being configured to receive said information from different types of context providers that provide different forms of information;

responsive to said receiving and using only the cellular phone and its associated on-board componentry, determining a current context based upon the information and a hierarchy data structure of attributes; and

modifying at least one behavior associated with the cellular phone responsive to the current context, wherein at least one of said one behavior is defined by a third party.

7. (ORIGINAL) The method of claim 6, wherein the behavior pertains to whether the phone is on or off.

8. (ORIGINAL) The method of claim 6, wherein the behavior pertains to operation of a cellular phone ringer.

9. (ORIGINAL) The method of claim 6, wherein the behavior pertains to whether the cellular phone is in a vibration mode.

10. (ORIGINAL) The method of claim 6, wherein the behavior pertains to a ringer pitch.

11. (ORIGINAL) The method of claim 6, wherein the behavior pertains to forwarding calls.

12. (ORIGINAL) The method of claim 6, wherein said modifying comprises using one or more cellular phone settings that are resident on the cellular phone to modify the cellular phone's settings.

13. (ORIGINAL) The method of claim 6, wherein said receiving comprises receiving cellular phone setting information that is to be used to modify the cellular phone's behavior.

14. (ORIGINAL) A cellular phone programmed to implement the method of claim 6.

15. (PREVIOUSLY PRESENTED) One or more readable media having readable instructions thereon which, when executed by a cellular phone, cause the cellular phone to:

wirelessly receive information from different context source information types that provide different forms of information that pertains to a context of the cellular phone;

responsive to receiving the information, determine the cellular phone context and modify at least one behavior associated with the cellular phone based on the information and a hierarchy data structure of attributes, wherein at least one of said

one behavior is defined by a third party and wherein each node of the data structure being capable of corresponding to either a physical or logical context.

16. (ORIGINAL) A cellular phone embodying the computer-readable media of claim 15.

17. (PREVIOUSLY PRESENTED) A cellular phone comprising:

multiple different types of location providers which collectively are configured to receive different forms of location information that can be used by the cellular phone to ascertain its location; and

one or more processors configured to:

receive information associated with a current location of the cellular phone; and

modify at least one behavior of the cellular phone responsive to the information and a hierarchy tree structure associating physical or logical locations to a plurality of attributes, wherein at least one of said one behavior is defined by a third party.

18. (ORIGINAL) The cellular phone of claim 17, wherein the information comprises cellular phone settings.

19. (ORIGINAL) The cellular phone of claim 17, wherein the one or more processors are configured to modify the one behavior by turning the phone on or off.
20. (ORIGINAL) The cellular phone of claim 17, wherein the one or more processors are configured to modify the one behavior by adjusting a ringer pitch on the phone.
21. (ORIGINAL) The cellular phone of claim 17, wherein the one or more processors are configured to modify the one behavior by turning a cellular phone ringer on or off.
22. (ORIGINAL) The cellular phone of claim 17, wherein the one or more processors are configured to modify the one behavior by placing the phone in a vibration mode.
23. (ORIGINAL) The cellular phone of claim 17, wherein the one or more processors are configured to modify the one behavior by forwarding one or more calls to a user-provided telephone number.
24. (PREVIOUSLY PRESENTED) A cellular phone comprising:

receiving means configured to wirelessly receive multiple different forms of information that pertains to a current location of a cellular phone and use said multiple different forms of information to ascertain the current location; and

means to modify at least one behavior associated with the cellular phone responsive to the current location and a hierarchy data structure associating physical or logical locations to a plurality of attributes, wherein at least one of said one behavior is defined by a third party.

25. (ORIGINAL). The cellular phone of claim 24, wherein said information pertains to cellular phone settings that are associated with the current location.

26. (PREVIOUSLY PRESENTED) The cellular phone of claim 24, wherein said information pertains to a defined location type associated with multiple different locations, of which the location is an instance.

27. (ORIGINAL) The cellular phone of claim 24, wherein said means to modify comprises means to change the cellular phone's behavior when it is no longer at the current location.

28-49. (CANCELED).

50. (PREVIOUSLY PRESENTED) A method of operating a cellular phone comprising:

- providing a cellular phone; and
- determining, with the cellular phone, a present cellular phone location wherein said determining comprises:
  - receiving location information;
  - accessing one or more hierarchical tree structures having nodes, each node being capable of corresponding to either a physical or logical location;
  - and
  - using the location information to traverse at least portions of the one or more tree structures to ascertain the present location.

51. (PREVIOUSLY PRESENTED) A cellular phone comprising:

- one or more computer-readable media;
- one or more hierarchical traversable tree structures resident on the computer-readable media, the tree structures comprising individual nodes, each of which is capable of being associated with either a physical or logical phone context; and
- one or more processors configured to:
  - receive information that pertains to a current context of the cellular phone;



automatically determine the current context based on the information by traversing at least one node on one of the trees; and  
modify at least one behavior of the cellular phone responsive to the current context.

52. (PREVIOUSLY PRESENTED) The cellular phone of claim 51 further comprising a context service module that is configured to receive information from multiple different context providers.

53. (CANCELED).

54. (PREVIOUSLY PRESENTED) A cellular phone comprising:  
a context service module that is configured to receive different forms of information from multiple different types of context providers; and  
one or more processors associated with the context service module and configured to:

receive information that pertains to a current context of the cellular phone;

determine the current context based on the information and a hierarchy data tree of attributes, wherein levels of the hierarchy tree of attributes are arranged in one or more classes selected from a group consisting of a

political abstraction, an administrative abstraction, and organization abstraction, a geographical abstraction, an infrastructure abstraction, a public place abstraction and a private entity abstraction; and

modify at least one behavior of the cellular phone responsive to the current context, wherein at least one of said one behavior is defined by a third party.

55. (CANCELED).

56. (PREVIOUSLY PRESENTED) The cellular phone of claim 54 further comprising the processors being configured to automatically determine the context by traversing at least one node of the hierarchy data tree of attributes.

57. (PREVIOUSLY PRESENTED) The cellular phone of claim 54 further comprising an application program interface that is configured to wirelessly receive information that is associated with the phone's context.

58. (PREVIOUSLY PRESENTED) A cellular phone comprising:  
location provider means for receiving different forms of location information;  
means for ascertaining a current location from the different forms of location information;

means for determining a context from the current location and a hierarchy tree structure, wherein the hierarchy tree structure comprises:

a plurality of nodes, wherein each node is linked to one or more other nodes;

a plurality of attributes corresponding to either a physical or logical context, wherein each attribute is associated with at least one node; and

means for modifying at least one behavior associated with the cellular phone responsive to the context.

59. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the information comprises one or more parameters selected from a group consisting of GPS specific information, a longitude, a latitude, internet protocol specific information, a cell identifier, a user entry, a city, a street, a building, network metadata, subnet and site information and a location type.

60. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the hierarchy data structure of attributes comprises:

a plurality of nodes, wherein each node is linked to one or more other nodes;

and

a plurality of attributes, wherein each attribute is associated with at least one node.

61. (PREVIOUSLY PRESENTED) The method of claim 60, wherein the nodes are arranged in one or more plurality of classes selected from a group of abstractions consisting of a political abstraction, an administrative abstraction, a geographical abstraction, an infrastructure abstraction, a public place abstraction, a physical location abstraction and a logical location abstraction.

62. (PREVIOUSLY PRESENTED) The method of claim 60, wherein determining the current context comprises mapping the information to a given node in the hierarchy data structure of attributes.

63. (PREVIOUSLY PRESENTED) The method of claim 62, wherein each node is linked to one or more other nodes to form a plurality of branches having a root node.

64. (PREVIOUSLY PRESENTED) The method of claim 63, wherein determining the current context further comprises:

traversing multiple nodes in a particular branch containing the given node; and  
ascertaining one or more of the attributes of the traversed nodes.

65. (PREVIOUSLY PRESENTED) The method of claim 63, wherein determining the current context further comprises:

determining a proximity of nodes in other braches to the given node; and  
ascertaining one or more of the attributes of the proximate nodes.

66. (PREVIOUSLY PRESENTED) The method of claim 60, wherein the attributes are one or more parameters selected from a group consisting of a unique identifier, a name, a geographic entity, a latitude, a longitude, a relative importance, a contextual parent, an entity unique identifier, a location unique identifier, a uniform resource locator, a source, a start date, an end date, a modification date, a status date, a resource, a service, a time, a time zone, a privacy level and a cellular phone setting.

67. (CANCELED).